

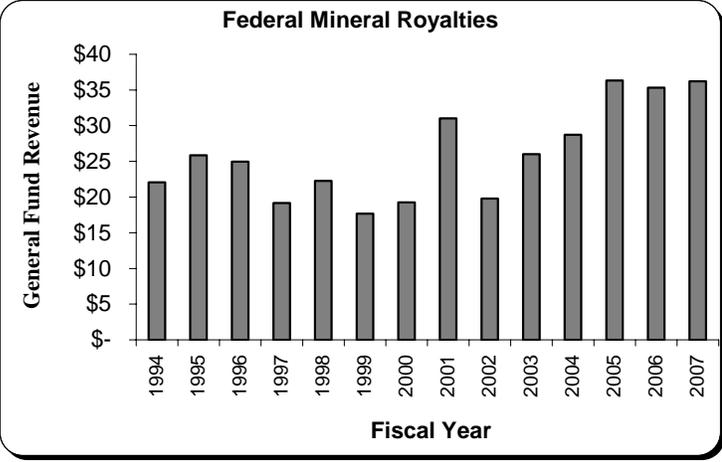
## U. S. MINERAL ROYALTIES

### Revenue Description

When the United States government leases public lands for mineral production, it pays part of the income to the state where the leased land is located. Montana receives a share of the revenue from coal, oil, and natural gas production on federal lands in the state. All payments to the state for mineral leases on federal land in Montana are deposited in the general fund. Following the close of the fiscal year, a share of the revenue is distributed to the counties where the royalties were earned. In FY 2004, 12.5% of the receipts were distributed to the counties. Beginning in FY 2005, 25% of the receipts will go to the counties.

### Historical and Projected Revenue

Table 1 shows actual U.S. mineral royalty payments to Montana for FY 1994 through FY 2004, and projected payments for FY 2005 through FY 2007.

<b>Table 1</b> <b>Federal Mineral Royalties - General Fund Revenue</b> <b>(\$ millions)</b>			
Fiscal Year	General Fund	Percent Change	
A 1994	\$ 22.052	1.16%	
A 1995	\$ 25.848	17.21%	
A 1996	\$ 24.959	-3.44%	
A 1997	\$ 19.161	-23.23%	
A 1998	\$ 22.241	16.07%	
A 1999	\$ 17.650	-20.64%	
A 2000	\$ 19.243	9.02%	
A 2001	\$ 31.008	61.14%	
A 2002	\$ 19.772	-36.23%	
A 2003	\$ 25.990	31.45%	
A 2004	\$ 28.736	10.57%	
F 2005	\$ 36.351	26.50%	
F 2006	\$ 35.322	-2.83%	
F 2007	\$ 36.219	2.54%	

Receipts in FY 2001 include approximately \$8 million in payments for production in previous years that was collected due to audits. Without these audit collections, receipts would have been approximately \$23 million. Receipts in FY 2002 should have been higher, but the Minerals Management Service paid \$1.7 million of royalties late. This amount was recorded in the state accounting system as an adjustment to the general fund ending balance rather than as revenue.

Actual FY 2004 revenue is \$30 million (\$28.736 recorded in SABHRS plus \$1.286 million from a SABHRS underestimate of fourth quarter accrual). The expected revenue shown in Table 1 for FY 2005 is \$7.6 million or 26.5% higher than SABHRS revenue in FY 2004, but, after adjusting SABHRS revenue for the accrual variance, expected FY 2005 revenue is only \$6.3 million or 21% higher than actual FY 2004 revenue. This increase is primarily due to expected increases in production and price for oil, natural gas, and natural gas liquids.

### **Forecast Methodology and Projection Calculation**

There are five steps to estimating revenues from federal mineral royalties:

1. Determining the revenue categories which comprise the FY 2004 U.S. mineral royalty payments;
2. Estimating mineral production;
3. Estimating mineral prices;
4. Adjusting the FY 2004 U.S. mineral royalty payments by the production and price changes; and
5. Estimating rents, bonuses and other payments.

#### FY 2004 Revenue Base for U.S. Mineral Royalty Payments

The Minerals Management Service distributes revenues to the states the month after the federal government receives it. During a fiscal year, the state receives payments for production in the first ten months of the fiscal year. At the end of the fiscal year, payments due for production in May and June are estimated and accrued. The detailed information available from the Minerals Management Service for the Montana FY 2004 payments is shown in Table 2.

<b>Table 2</b>						
<b>Federal Mineral Royalty Payments to Montana</b>						
<b>Production During FY 2004</b>						
<b>(\$ millions)</b>						
<u>Coal Royalties</u>	<u>Natural Gas Royalties</u>	<u>Natural Gas Liquids Royalties</u>	<u>Oil Royalties</u>	<u>Rents</u>	<u>Bonus and Other</u>	<u>Total Payments</u>
\$15.843	\$5.268	\$0.199	\$5.710	\$0.684	\$2.288	\$29.993

#### Mineral Production

Coal companies operating in Montana provided estimates of their coal production through 2007, and the portion of production they expected to occur on federal land. A

coal company's production varies from year to year according to the their long-term contracts and logistics. The fraction of a company's production that is on federal land varies from year to year because of the checkerboard ownership of mineral rights.

Based on information from the Minerals Management Service, federal coal production declined almost 12% in FY 2003 and 3% in FY 2004. Based on the survey information, federal coal production is projected to increase slightly in FY 2005, decrease 4% in FY 2006, and then increase 8% in FY 2007.

Natural gas, natural gas liquids, and oil production on federal lands in FY 2005 through FY 2007 was estimated by applying the growth rates for total production in the state used in the oil and gas tax forecast to the estimated federal production for FY 2004. Natural gas and natural gas liquids production is forecast to increase 12% in FY 2005, 9% in FY 2006, and 7% in FY 2007. Oil production is expected to increase 19% in FY 2005, 14% in FY 2006, and 11% in FY 2007.

Table 3 shows the annual percent change projected for coal, natural gas, natural gas liquids, and oil production on federal lands in Montana for FY 2005 through FY 2007.

<b>Table 3</b>				
<b>Annual Percent Change for Mineral Production on Federal Land in Montana FY 2005 through FY 2007</b>				
Fiscal Year	Coal	Natural Gas	Natural Gas Liquids	Oil
F 2005	2.26%	12.37%	12.37%	18.67%
F 2006	-3.82%	9.41%	9.41%	14.29%
F 2007	8.29%	7.35%	7.35%	10.62%

### Mineral Prices

Coal prices were estimated by applying Global Insight's October 2004 forecast of annual percentage changes in national average coal prices to prices of each mine obtained from the last year of coal severance tax returns and making one adjustment for information obtained from discussion with a coal company. Individual mines receive different prices because of differences in the quality of their coal in transportation costs. For FY 2005 through FY 2007, the federal mine price was assumed to change at the same rate as the weighted average coal severance tax mine price.

Prices for natural gas and oil for FY 2005 through FY 2007 were estimated by applying the same average percentage change in spot and futures market prices as used in the combined oil and natural gas revenue estimate. The natural gas liquids price was obtained from spot and future market prices.

Table 4 shows the annual percent price change forecast for coal, natural gas, natural gas liquids, and oil produced on federal lands in Montana for FY 2005 through FY 2007.

<b>Table 4</b>				
<b>Annual Percent Change for Montana Mineral Prices</b>				
<b>FY 2005 through FY 2007</b>				
<u>Fiscal Year</u>	<u>Coal</u>	<u>Natural Gas</u>	<u>Natural Gas Liquids</u>	<u>Oil</u>
F 2005	-3.21%	28.96%	44.05%	43.74%
F 2006	-4.65%	-4.17%	-7.15%	-13.44%
F 2007	-2.53%	-9.66%	0.00%	-6.63%

Substantial increases are expected for prices of natural gas, natural gas liquids, and oil in FY 2005. These expected increases in price correspond with expected increases in production to generate the large increase in general fund revenue for FY 2005 seen in Table 1.

#### Change in Mineral Royalty Payments

The mineral royalty payments to Montana are forecast to increase by the annual percent change that the combined production (Table 3) and price changes (Table 4) produce. Table 5 shows the annual percent change expected by mineral and by fiscal year for the U.S. mineral royalty payments. As shown in Table 5, coal royalties are expected to decrease in FY 2005 and FY 2006 and then increase in FY 2007. Natural gas, natural gas liquids, and oil are expected to increase substantially in FY 2005 and vary some in FY 2006 and FY 2007, but not have the dramatic change that FY 2005 does.

<b>Table 5</b>				
<b>Annual Percent Change for Federal Mineral Royalties</b>				
<b>FY 2005 through FY 2007</b>				
<u>Fiscal Year</u>	<u>Coal</u>	<u>Natural Gas</u>	<u>Natural Gas Liquids</u>	<u>Oil</u>
F 2005	-1.02%	44.92%	61.87%	70.57%
F 2006	-8.29%	4.85%	1.59%	-1.07%
F 2007	5.55%	-3.02%	7.35%	3.28%

## Rents, Bonuses, and Other Revenue

Rents are annual payments on leases not currently under production made to retain rights to the leases. Federal oil and natural gas leases generally have a term of five years, which will be extended if the leaseholder demonstrates that it contains commercially producible reserves. Coal leases have terms of at least 20 years, and can be extended as long as production continues. Some lease agreements specify that rent payments continue for the life of the lease, while others do not require rent payments from leases that are paying royalties. The state share of rents is forecast to remain at \$684,000, the FY 2004 level, for FY 2005 through FY 2007

Bonuses are payments made to obtain the rights to mineral leases. The bonuses that producers pay to obtain mineral leases in any year depend on the acreage offered for bids, producers' expectations of future mineral prices, producers' beliefs about the size and quality of deposits on particular lease tracts, and the ease or difficulty of getting financing for mineral exploration and development. Because all of these factors vary from year to year, bonus payments may show great variation.

Other royalties include royalties on sand and gravel, sulfur, carbon dioxide and other minor products plus payments resulting from audits of previous years' production and royalties. It also includes some payments not directly related to mineral production, such as pipeline right-of-way fees. The Department of Revenue audits royalty collections on federal land in Montana, with the Minerals Management Service paying the full cost. Audit revenues typically vary greatly from year to year, following no particular pattern. Because of this lack of pattern, the state share of bonuses and other revenues is forecast to continue at the FY 2004 level of \$2.288 million through FY 2007.

## Payments to Counties

Federal law requires that a portion of mineral royalties go to the counties where mineral production occurred. The 2001 Legislature passed HB 226 to comply with this federal requirement. For FY 2002 and FY 2003, royalties in excess of the HJR 2 revenue estimates were allocated to the counties where mineral production occurred. In FY 2004, 12.5% of U.S. mineral revenues were allocated to the counties. Beginning in FY 2005, 25% will be allocated to the counties each year.

## Summary of U.S. Mineral Royalty Revenues

The SABHRS number for U.S. mineral royalty payments is \$28.736 million. When the SABHRS number is adjusted to actual revenue for FY 2004 it would be \$30.022 million. The federal data by mineral and other revenue categories shows a Montana revenue base of \$30 million for FY 2004.

Table 6 shows the FY 2004 revenue base of \$29.993 that was used in the revenue estimate and the table gives the annual state share of federal mineral royalties revenue by type and the county payments for FY 2005 through FY 2007. It is forecast that U.S. mineral royalty payments will be \$36.351 million in FY 2005, \$35.322 million in FY 2006, and \$36.219 million in FY 2007. The state share in FY 2005 is forecast to be 21% higher than FY 2004 actual revenue due primarily to forecast increases in production and price for oil, natural gas, and natural gas liquids.

<b>Table 6</b>				
<b>Receipts from Federal Mineral Royalties</b>				
<b>(\$ millions)</b>				
Revenue Type	FY 2004	FY 2005	FY 2006	FY 2007
Coal Royalties	\$15.843	\$15.681	\$14.381	\$15.179
Gas Royalties	\$5.268	\$7.635	\$8.005	\$7.763
NGL Royalties	\$0.199	\$0.322	\$0.328	\$0.352
Oil Royalties	\$5.710	\$9.740	\$9.636	\$9.952
Rents	\$0.684	\$0.684	\$0.684	\$0.684
Bonus and Other	\$2.288	\$2.288	\$2.288	\$2.288
Total	<u>\$29.993</u>	<u>\$36.351</u>	<u>\$35.322</u>	<u>\$36.219</u>
County Distribution	\$3.502	\$9.088	\$8.830	\$9.055